

# Sainsbury's



Setting Sail for Adventure:  
Agility in App Development

CodeMobile

Ross Butler

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# The Agile Developer

Kent Beck

Mike Beedle

Arie van Bennekum

Alistair Cockburn

Ward Cunningham

Martin Fowler

Robert C. Martin

Steve Mellor

Dave Thomas

James Grenning

Jim Highsmith

Andrew Hunt

Ron Jeffries

Jon Kern

Brian Marick

Ken Schwaber

Jeff Sutherland

# Agile Manifesto

**Individuals and interactions** over processes and tools

**Working software** over comprehensive documentation

**Customer collaboration** over contract negotiation

**Responding to change** over following a plan

# Lean Software Development

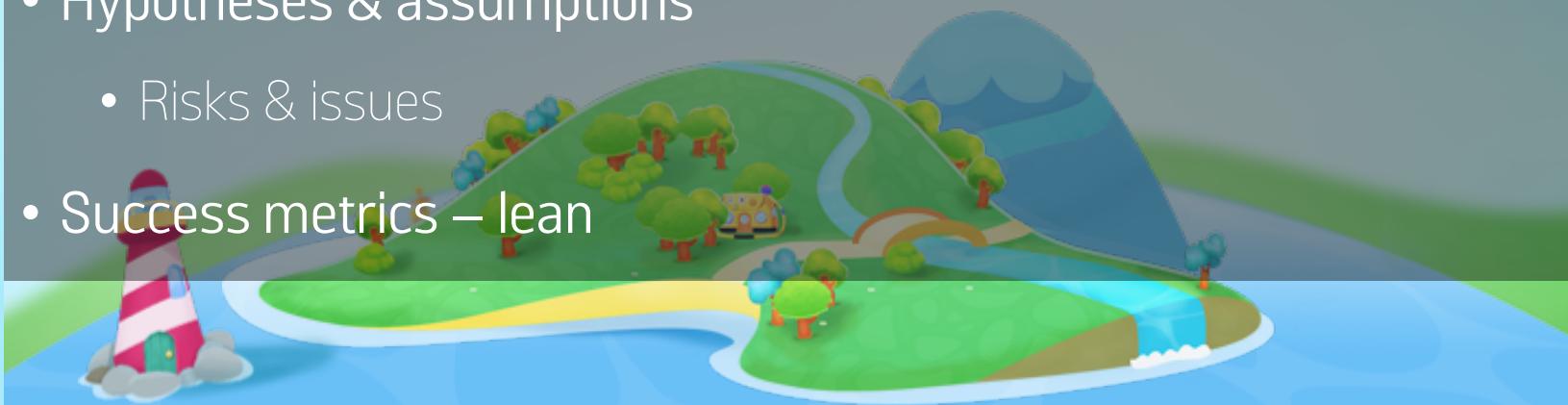
- Lean Software Development: An Agile Toolkit – Mary Poppendieck & Tom Poppendieck
- Manufacturing – Toyota
- Eliminate waste
- Amplify learning
- Decide as late as possible
- Deliver as fast as possible
- Empower the team
- Build integrity in
- See the whole

# Agile & Lean UX

- Agile UX
  - Where does design / user research fit into Agile?
  - Shift from deliverables towards closer collaboration
- Lean UX
  - Prototyping, early user feedback
- Design sprints

# Casting Off – The Proposition

- *Should* we build?
- Proposition
  - What do want to achieve?
- Data analysis
- Hypotheses & assumptions
  - Risks & issues
- Success metrics – lean



# Ideation

- What *could* we build?
- Lean UX – Collaborative design
- Market research
- Crazy eights & dot voting



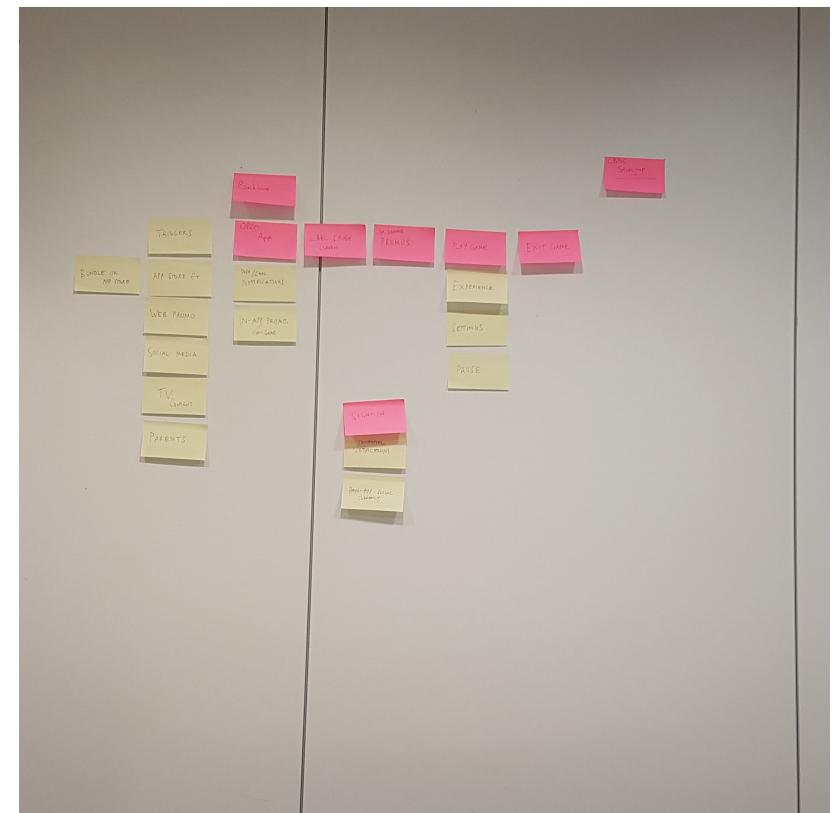
# Design

- Audience panels
  - Early user feedback
- Co-creation sessions
- Stepping out
- Pairing



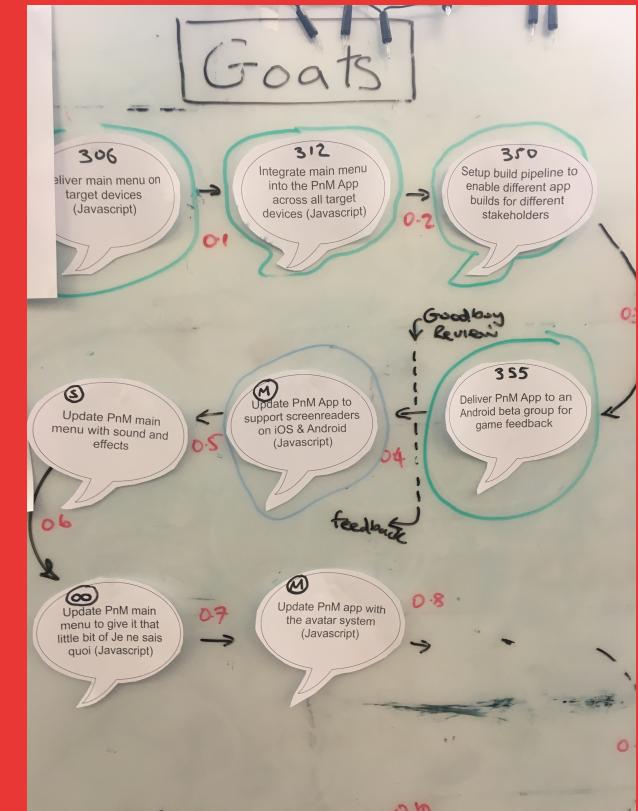
# Story Mapping

- What **will** be build?
- Sessions involving whole team
- Outline basic user journey
- Draw line to define Minimum Value Proposition (Lean Startup)



# Setting Sail – Shaping

- How will we build it?
- BA captures requirements
- Technical feasibility
  - Research Spikes
- Accessibility – Voiceover & Talkbalk
- Goals & roadmap
- Smallest testable increment



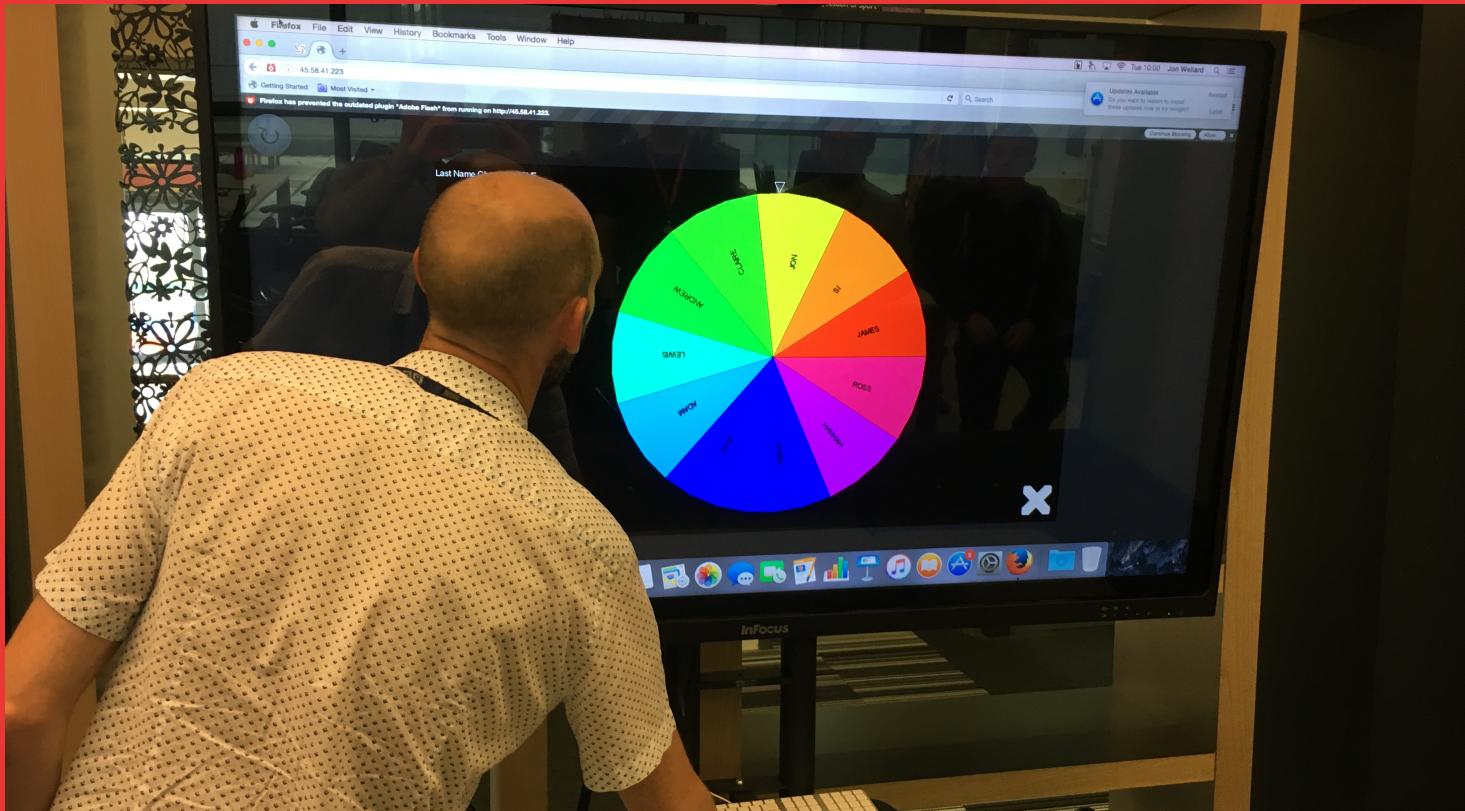
# Three Amigos

- Dev, QA & BA (Product)
- Scenarios (BDD) & acceptance criteria
- Analytics (measure), accessibility
- Dependencies
- Development backlog

# Daily Stand-ups

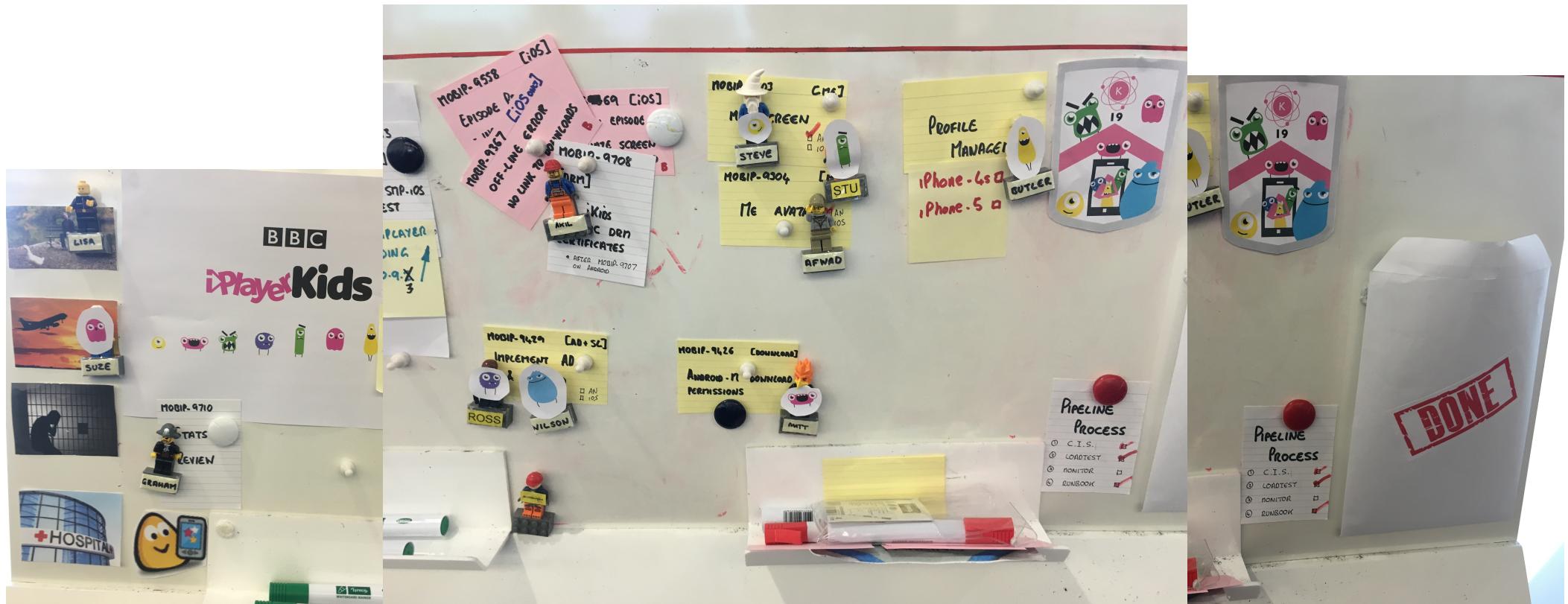


# Daily Stand-ups



*"Build projects around motivated individuals.  
Give them the environment and support they need,  
and trust them to get the job done" – Principles behind the Agile Manifesto*

# Daily Stand-Ups



# Daily Stand-ups

Children's Pick n Mix - Master

QUICK FILTERS: [Hide Epics](#) [Only Epics](#) [Only My Issues](#) [Recently Updated](#) [Screen reader goal](#) [Je Ne Sais Quoi](#)

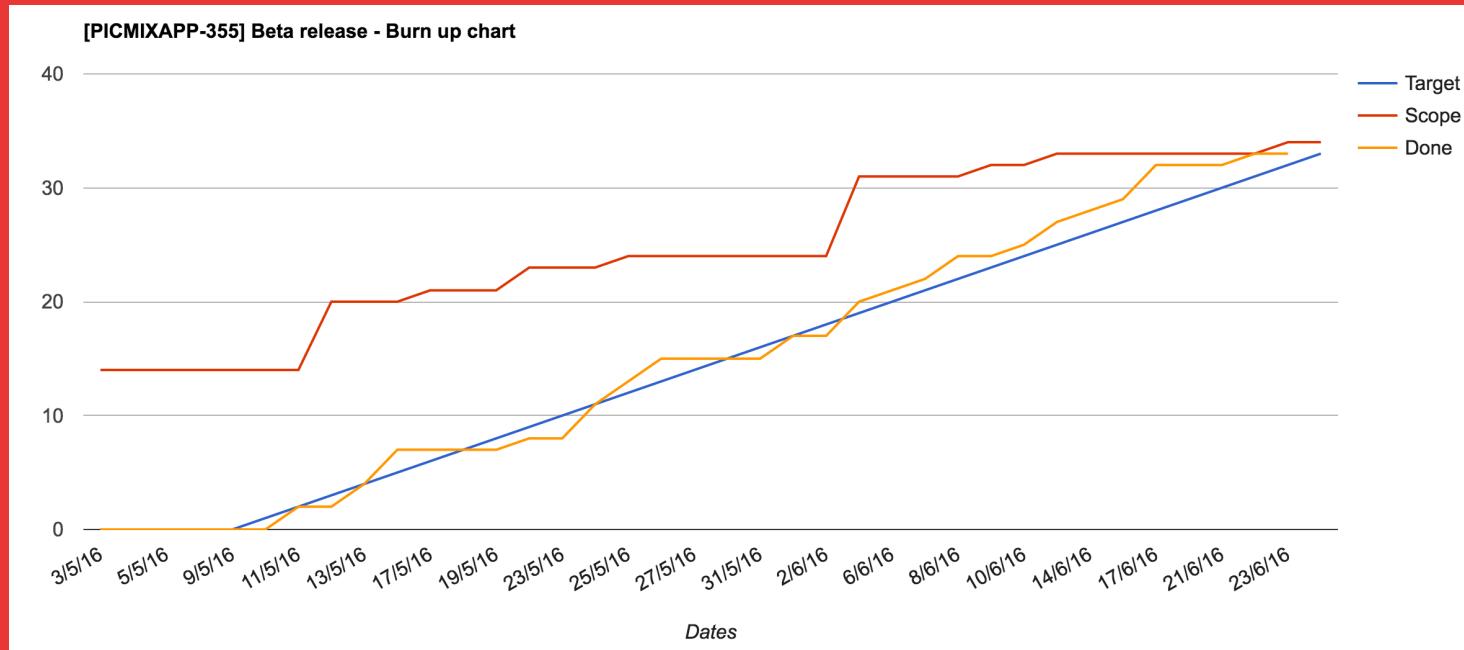
Shaping	Dev backlog	In development	Ready for QA	In QA & Bug fixing	Ready for UAT	In UAT	Release...
18	15	3	6	3	0	0	0
Min 6	Min 3 Max 6	Max 3	Max 3	Max 3	Max 3	Max 2	Ready to Deploy

Apps Maintenance 1 issue

PICMI...-563 [TEMPLATE] Bug Ticket	PICMI...-710 [iOS] Echo V13.3.0 upgrade	PICMI...-461 Close on parental gate doesn't have a sufficient hit	PICMI...-624 [iOS] SplashScreen				
PICMI...-684 [Web] Review of motion on/off animation	PICMI...-701 [iOS] Cannot return from pause menu when in		PICMI...-697 [Web] App starts from avatar island if paused during				
PICMI...-514 [iOS] Localised Strings	PICMI...-667 [Android+iOS] Accessibility element read out as button		PICMI...-700 [iOS] The island can be shifted off screen in				
PICMI...-696 [iOS] Hardware sound switch mutes all	PICMI...-669 [Web] Background music is not currently being						



# Burn-up Charts



# Continuous Integration

- GitHub, GitLab
- Mac Mini & Jenkins
- Data protection / infosec
- QA - HockeyApp
- Regression & Beta - Google Play / TestFlight

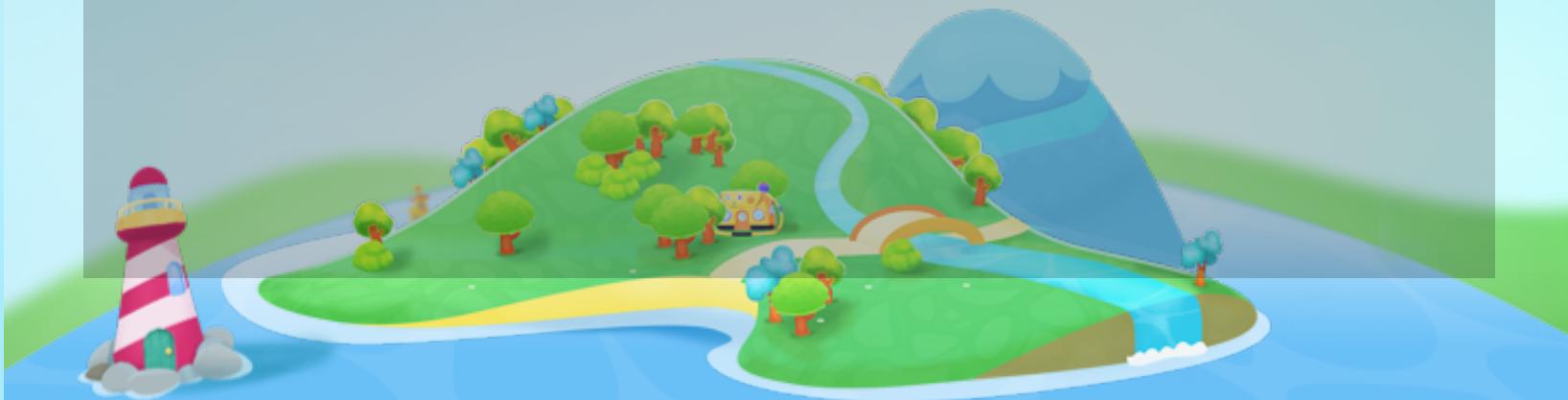


# Continuous Integration



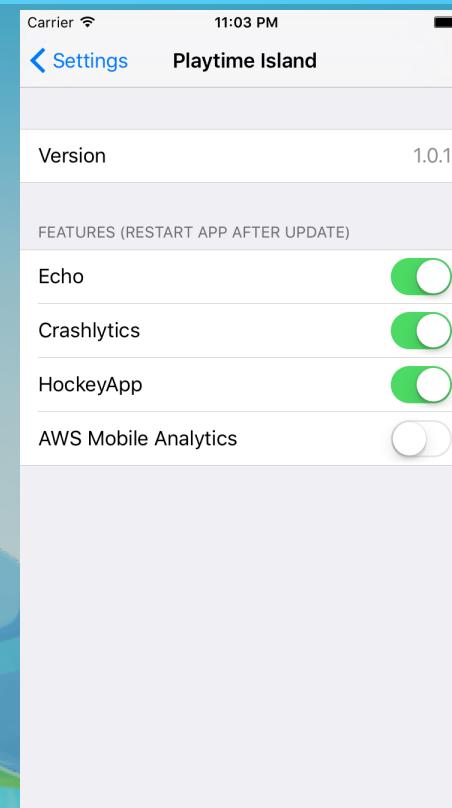
# Continuous Delivery

- QA
- Beta testing group: MVT
- Stakeholders
- Games team / 3<sup>rd</sup> party developers
- Store



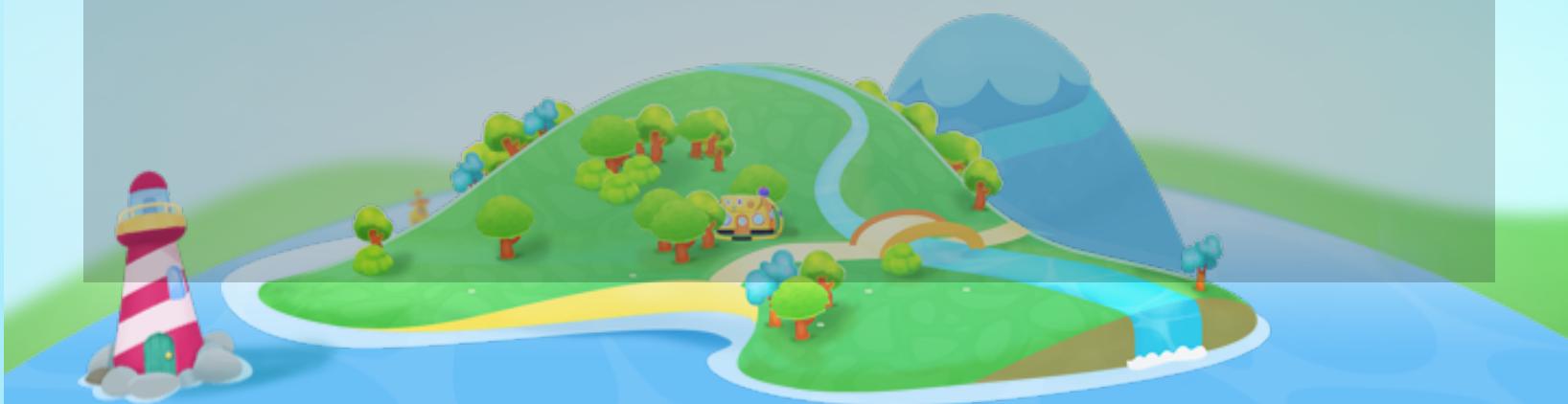
# Continuous Delivery

- Versioning
- Feature flags
- Remote configuration
  - Support pan-app requirements



# Beta Group

- TestFlight, Google Play
- Feedback button
- Feedback distributed to team
- New tickets / UX refinements



# Automated Testing & BDD

- Unit tests
- Xcode UI Tests
- BDD
- Gherkin syntax

# Sprint Review



# Retrospectives



# Casting Anchor- Analysis

- Build, measure, **learn**
- User feedback – App Store, Beta Group
- Stepping In
- Analytics & crash reporting
- KPI

# Coming Ashore

- Validated learning
- Pivot
- And finally - celebrate successes 
- @ross\_w\_butler

# References

- *Agile Manifesto*

*Kent Beck, Mike Beedle, Arie van Bennekum, Alistair Cockburn, Ward Cunningham, Martin Fowler, James Grenning, Jim Highsmith, Andrew Hunt, Ron Jeffries, Jon Kern, Brian Marick, Robert C. Martin, Steve Mellor, Ken Schwaber, Jeff Sutherl & Dave Thomas*

<https://www.agilealliance.org/agile101/the-agile-manifesto/>

- *Lean Software Development: An Agile Toolkit - Mary Poppendieck & Tom Poppendieck*
- *The Lean Startup – Eric Reis*
- *Principles behind the Agile Manifesto*

*Kent Beck, Mike Beedle, Arie van Bennekum, Alistair Cockburn, Ward Cunningham, Martin Fowler, James Grenning, Jim Highsmith, Andrew Hunt, Ron Jeffries, Jon Kern, Brian Marick, Robert C. Martin, Steve Mellor, Ken Schwaber, Jeff Sutherl & Dave Thomas*

<http://agilemanifesto.org/iso/en/principles.html>